

## REMARKS

In the patent application, claims 1-36 are pending. In the office action, all pending claims are rejected.

Applicant has amended claim 1 to include the limitation that at least two of said plurality of signals paths are adapted to simultaneously receive communication signals in a plurality of frequency bands from one of the antennas through one of the two feed points and at least a different one of the said plurality of signal paths is adapted to receive communication signals from another one of the antennas through the other of the two feed points in a further frequency band different from the said plurality of frequency bands.

The support for the amendment can be found in Figures 2A and 2B, wherein signal paths 112, 132 are adapted to receive signals in two frequency bands (869-894, 925-960) from antenna 10, and signal path 222 is adapted to receive signals in a different frequency band (1805-1880) from antenna 20.

Applicant has also amended claim 33 to include the limitation that at least two of said plurality of signal paths are operatively connected to the first feed point for receiving communication signals through the first feed point, and at least a different one of said plurality of signal paths to the second feed point for receiving communication signals through the second feed point. The first feed point and the second feed point are connected separately to two antennas

The support for the amendment can be found in Figures 2A and 2B wherein receive signal path 112 is connected to a feed point through filter 32 and receive signal path 222 is connected to a feed point 422.

No new matter has been introduced.

At section 3 of the office action, claims 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Dvorkin* (U.S. Patent No. 6,381,471) in view of *Ahonen* (U.S. Patent No. 5,507,010).

In rejecting claim 33, the Examiner states that *Dvorkin* discloses a receive front-end module for use in a multi-band, multi-mode communication device. The Examiner admits that

*Dvorkin* does not disclose at least two signal paths connected to simultaneously receive communication signals from one of the antennas through one of the two feed points, but points to *Ahonen* for disclosing this feature. In particular, the Examiner points to Figure 1, blocks 1A, 1B, 10A and 10B of *Ahonen*.

In *Dvorkin*, only one antenna 4 is used to receive communication signals. Likewise, *Ahonen* has only one receive antenna. In contrast, claim 33 has the limitation that at least two antennas are used to receive communication signals separately through the first feed point and the second feed point. Thus, claim 33 is distinguishable over the cited *Dvorkin* and *Ahonen* references.

In rejecting claim 34, the Examiner states that *Dvorkin* discloses a first feed point and second feed point separately connected to two antennas for receiving communication signals. We disagree.

*Dvorkin* has only one antenna 4 for receive communication signals. Likewise, *Ahonen* has only one receive antenna. In contrast, claim 34 has the limitation that at least two antennas are used to receive communication signals separately through the first feed point and the second feed point. Thus, claim 34 is distinguishable over the cited *Dvorkin* and *Ahonen* references.

As for claims 35 and 36, they are dependent from claim 34 and recite features not recited in claim 34. For reasons regarding claim 34 above, claims 35 and 36 are also distinguishable over the cited *Dvorkin* and *Ahonen* references.

At section 4, claims 1-3 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Lahti* (U.S. Patent Application Publication No. 2002/0045427) in view of *Dvorkin* and further in view of *Ahonen*.

It is respectfully submitted that claim 1 includes the following limitations:

- 1) at least two antennas having separate feed points for receiving communication signals;
- 2) a plurality of signal paths, operatively connected to the feed points for simultaneously receiving communication signals in a plurality of frequency bands, wherein each

signal path has a filter for filtering the communication signals in the corresponding frequency band;

- 3) at least one isolation component, disposed in the signal paths, for providing cross-band isolation between at least two of the signal paths;
- 4) at least two signals paths to simultaneously receive communication signals in two frequency bands from one of the antennas through one of the two feed points; and
- 5) a signal path in another antenna to receive communication signals in a different frequency band through a different feed point.

It is respectfully submitted that *Lahti* does not disclose or even suggest having at least two signal paths adapted to simultaneously receive communication signals in a plurality of frequency bands from one antenna (claim limitation No. 4) and at least one different signal path adapted to receive communication signals from another antenna in a different frequency band (claim limitation No. 5). *Lahti* only discloses received communication signals of the same frequency but different polarization properties alternately through two antennas (see [0011], [0012] Figures 3 – 9).

*Dvorkin* only discloses one antenna for receiving communication signals.

*Ahonen* only discloses one antenna for receiving communication signals.

Thus, the combination of teachings in *Lahti*, *Dvorkin* and *Ahonen* does not render claim 1 obvious.

As for claims 2, 3 and 6-10, they are dependent from claim 1 and recite features not recited in claim 1. For reasons regarding claim 1 above, it is respectfully submitted that claims 2, 3 and 6-10 are also distinguishable over the cited *Lahti*, *Dvorkin* and *Ahonen* references.

At section 5, claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Dvorkin* in view of *Ahonen* and further in view of *Gitlin et al.* (U.S. Patent No. 6,188,718, hereafter referred to as *Gitlin*). The Examiner cited *Gitlin* for disclosing a third antenna.

At section 6, claims 4, 5, 11, 12 and 16-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Dvorkin*, *Ahonen*, and *Gitlin*, in view of *Ella* (U.S. Patent Application Publication No. 2003/0128081). The Examiner cited *Ella* for disclosing one or more baluns.

It is respectfully submitted that claims 4, 5, 11-15 and 16-32 are dependent from claims 1 and 34 and recite features not recited in claims 1 and 34. For reasons regarding claims 1 and 34 above, these dependent claims are also distinguishable over the cited *Lahti*, *Dvorkin*, *Ahonen*, *Gitlin* and *Ella* references.

### CONCLUSION

Claims 1-36 are allowable. Early allowance of all pending claims is earnestly solicited.

Respectfully submitted,



---

Kenneth Q. Lao  
Attorney for the Applicant  
Registration No. 40,061

WARE, FRESSOLA, VAN DER SLUYS  
& ADOLPHSON LLP  
Bradford Green, Building Five  
755 Main Street, P.O. Box 224  
Monroe, CT 06468  
Telephone: (203) 261-1234  
Facsimile: (203) 261-5676  
USPTO Customer No. 004955